CHAPTER FOUR – OUTDOOR WATER USE

Incidence of Yards and Lawns

Q25: Do you have a yard?

To help filter respondents through the outdoor water section of the interview, respondents were first asked if they had a yard. As shown in **Figure 19** below, over two-thirds (77%) do have yards, while 23% do not. Data comparisons show that significantly more Purveyor respondents have yards than Seattle respondents (80% vs. 74%).



Figure 19 - Respondents Who Have A Yard (Q25)

Regional Comparison – Have yard? Sig. = <.05	Seattle %	Purveyor %
Yes	74	80
No	26	20
N=	603	620

Q26: Of the yard around your home that's planted with lawn and garden, how much of it is lawn?

To further filter respondents through this outdoor section, respondents with yards (77% of the total population) were then asked if any part of their yard was planted with lawn. As shown in **Figure 20**, 9% report their yards have no lawn. The remaining yards are fairly evenly divided between those where up to ¼ of their yard area is lawn (20%), ¼ to ½ of their yard area is lawn (24%), ½ to ¾ of the yard area is lawn (26%), and over ¾ of the yard area is lawn (20%). No significant differences emerged between Seattle and Purveyor customers. However, given that Purveyor yards tend to be larger than Seattle yards, the amount of lawn per customer is likely larger in Purveyor areas.

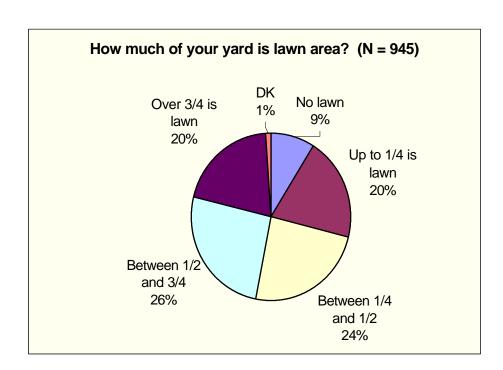


Figure 20 - Amount of Lawn Area in Yard (Q26)

Regional Comparison – Amount of lawn N.S.	Seattle %	Purveyor %
None	8	10
Up to ¼	21	19
1/4 to 1/2	26	23
½ to ¾	28	24
Over ¾	16	23
N=	445	497

Although the proportion of yards with no lawns has remained stable, it appears lawn coverage has risen since 1994. In 1994, 32% of respondents reported they had lawn planted on $\frac{1}{2}$ or more of their yards; in 1999, 47% report that $\frac{1}{2}$ or more of their yards are planted in lawn.

Table 11 - Amount of Lawn in the Yard (Q26)

Over Time Comparison – Amount of Lawn	1994 Survey %	1999 Survey %
No lawn	8	9
Up to ¼ of yard area	27	19
1/4 to 1/2	32	25
½ to ¾	24	27
Over ¾ of yard area	8	20
Don't know	-	1
N=	2421	900

Lawn Care Preferences and Practices

Q27: How important is it for you to have a green lawn as part of your landscaping?

Q28: How willing would you be to have a natural lawn if a natural lawn is a lighter green color, has a few weeds, and is moved a little higher than you're used to?

The 860 respondents (70% of the total population) who had at least part of their yard as lawn were asked how important it was to have a <u>green</u> lawn. As shown in **Figure 21** below, nearly half (46%) said it was either very (16%) or somewhat (30%) important, while the other half (52%) said it was either not too (28%) or not at all (26%) important to have a green lawn.

Purveyor customers place a higher value on having a green lawn, with 52% saying it was important, compared to 37% of the Seattle population. Notably, the importance of a green lawn has decreased appreciably since 1994, from 61% saying it was important in 1994 to 45% in1999. (See **Table 12**)

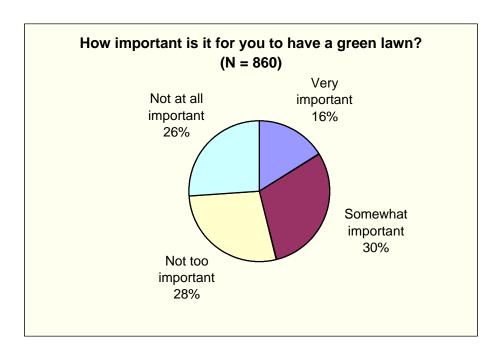


Figure 21 - Importance of Having a Green Lawn (Q27)

Regional Comparison – Importance of a Green Lawn Sig. = <.05	Seattle %	Purveyor %
Very important	11	19
Somewhat important	26	33
Not too important	30	26
Not at all important	32	22
N=	410	448

Table 12 - Importance of Green Lawn (Q27)

Over Time Comparison— Importance of a Green Lawn	1994 Survey %	1999 Survey %
Very important	22	16
Somewhat important	39	29
Not too important	27	28
Not at all important	12	26
Don't know	_	_
Single Family Homes N=	2255	821

Respondents with lawns were then asked how willing they would be to have a "natural lawn" (lighter green color, with few weeds and if mowed a little higher than usual). Nearly three-fourths (72%) said they would be either very (43%) or somewhat (29%) amenable to having a natural lawn, as shown in **Figure 22** below. Twenty-four percent (24%) said they would be either not too (13%) or not at all likely (11%) to have a natural lawn, and 4% didn't know.

Seattle customers are significantly more likely to be willing to have a natural lawn than Purveyor respondents, with 77% of the Seattle customers saying they would be very or somewhat likely compared to 69% of Purveyor customers.

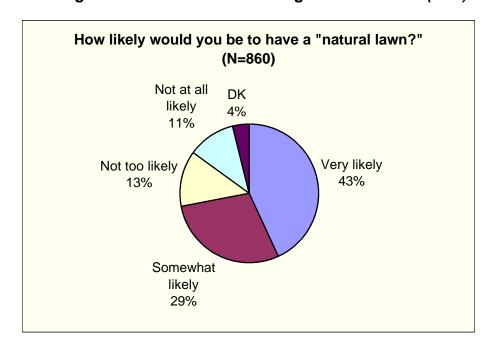


Figure 22 - Likelihood of Having a Natural Lawn (Q28)

Regional Comparison- Willingness to Have a Natural Lawn Sig. = < .05		Seattle %	Purveyor %
Very likely		48	40
Somewhat likely		29	29
Not too likely		8	16
Not at all likely		10	13
N:	=	410	448

Lawn Watering

Q29: About how often do you water your lawn during a typical summer?

When asked how often they watered their lawn during a typical summer, nearly a third (30%) of customers with lawns said they never water it. About a quarter (24%) water twice a month or less, or once a week;14% water every 3 days; 5% water every other day; and 2% water every day (**Figure 23**). No significant differences exist between Seattle and Purveyor customers.

As shown in **Table 13**, the trend toward never watering and watering less is on the rise. From 1991 to 1999, the percentage of single family households who never water has gone from 15% to 30% and the frequency of watering has dropped as well. For example, in 1991 the percent of customers watering their lawn twice a month or less was 14% compared to 35% in the 1999 survey.

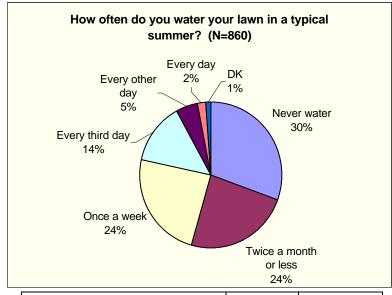


Figure 23 - How Often Lawn Is Watered During a Typical Summer (Q29)

Regional Comparison—How Often Water? <i>N.S.</i>	Seattle %	Purveyor %
Never	36	27
Twice a month	23	24
Once a week	21	25
Every third day	14	15
Every other day	3	6
Every day	2	2
N=	410	448

Table 13 - How Often Lawn is Watered (Q29)

Over Time Comparison – How Often Water Lawn?	1991 Survey %	1994 Survey %	1999 Survey %
Never water	15	23	30
Twice a month or less	14	17	35
Once a week	26	35	35
Every three days	45	37	21
Every other day	14	9	7
Every day	2	2	2
(Single family households who have a lawn) N =	Not availalble	2232	821

Use and Maintenance of Automatic Sprinkling Systems

Q30: Do you use an automatic sprinkling system to water your lawn?

Q31: During the watering season, do you adjust the automatic system so that it waters less when it's cooler and more when it's hotter?

Q32: Do you inspect your automatic system for leaks at least once a year?

Lawn waterers were then asked if they used an automatic sprinkler system. While 79% of households do not use automatic sprinklers, 21% do, as shown in **Figure 24**. In addition, over half (59%) report they adjust the system for temperature changes, and 74% say they have the system inspected for leaks at least once a year (see call out boxes in **Figure 24**). No significant differences exist between Seattle and Purveyor customers, and no change occurred between the 1994 and 1999 surveys.

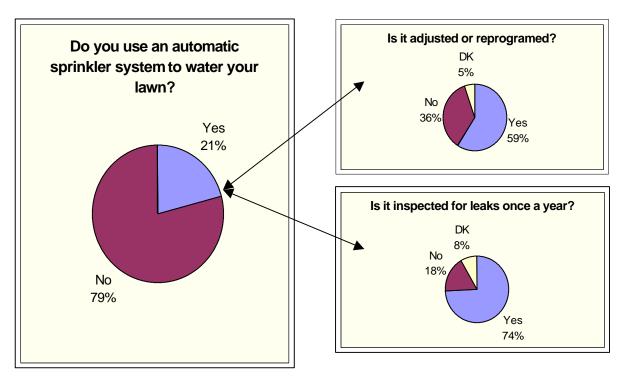


Figure 24 - Use Of Automatic Sprinkler System (Q30 - Q32)

Comparison-automatic systems	YES		NO	
All N.S.	Seattle	Purveyor	Seattle	Purveyor
	%	%	%	%
Use a system? (N = 594)	19	23	81	77
Adjusted for temperature? (N = 125)	47	66	47	30
Inspected? (N = 125)	63	80	29	12
	_		_	

Table 14 - Use of Automatic Watering Systems

Over Time Comparison		1994 Survey %	1999 Survey %
Use automatic watering system		18	21
	N=	1594	594

Lawn Care

Do you . . .

- Q33. Usually mow your lawn with a mulching mower?
- Q34. Usually leave your grass clippings on your lawn?
- Q35. Usually use an organic or slow release fertilizer on your lawn?
- Q36. Usually use a "weed 'n' feed" type product on your lawn?
- Q37. Usually use pesticides to control crane flies?
- Q38. Usually aerate and over-seed your lawn?

All respondents with lawns (70% of the population) were asked a series of questions about the methods they use to care for their lawns (see **Figure 25** below). Just over half (52%) report they leave grass clippings on their lawns, 43% use a mulching mower, 41% use organic or slow release fertilizer, and 29% aerate and over-seed their lawns – all water saving, environmentally friendly practices. However, 34% say they use a weed-n-feed type product and 13% said they use pesticides to control crane flies – both less environmentally sound.

Some significant differences do surface between Seattle and Purveyor customers. While they are equally likely to use a mulching mower and organic fertilizer, Seattle customers more likely leave grass clippings on the lawn, while Purveyor customers more likely aerate and over-seed their lawns. Purveyor customers are also more likely to use weed 'n' feed type products and pesticides to control crane flies.

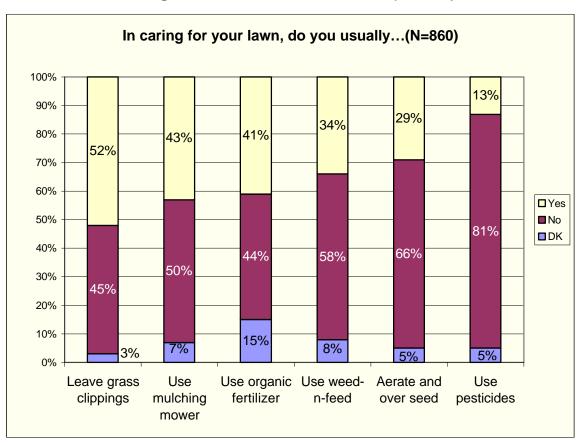


Figure 25 - Lawn Care Practices (Q33-38)

Regional Comparison- Lawn Care Practices	YES		YES NO		0
	Seattle %	Purveyor %	Seattle %	Purveyor %	
Leave grass clippings Sig. = < .05	55	50	41	49	
Use mulching mower N.S.	41	45	50	50	
Use organic fertilizer N.S.	37	43	48	42	
Use weed n feed Sig. = < .05	26	40	65	52	
Aerate and over seed Sig. = <.05	21	34	73	61	
Use pesticides	8	18	87	77	
N=	410	448	410	448	

Lawn Removal and Replacement

Q39: In the past five years, since 1994, have you removed any of your lawn? Q40: Did you replace your lawn with garden areas with plants and shrubs, including rockeries, or something else like a patio, deck, or garage?

Respondents were asked if they had removed any of their lawn in the past five years. Nearly 3 in 10 (29%) said they had, as shown in **Figure 26**. When asked what they are replaced the lawn with, 70% said they had replaced it with garden areas, and the remaining 30% replaced it with something else. **Table 15** suggests there may be a slight decrease in single family households removing lawn between 1994 and 1999.

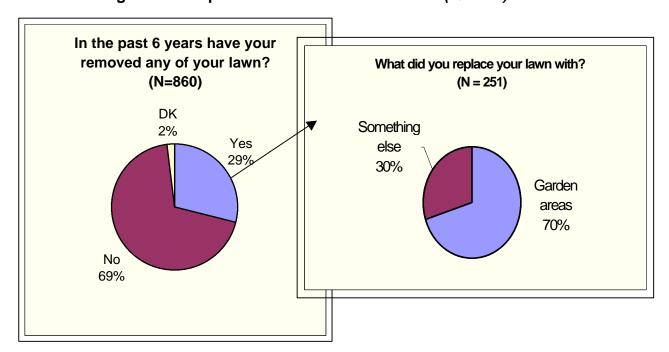


Figure 26 - Replacement of Lawn in the Yard (Q39-40)

Regional Comparison Removed Lawn? N.S.	Seattle %	Purveyor %
Yes	32	27
No	66	71
N=	410	448
If Yes: Replaced with garden?	77	64
Replaced with something else?	23	36
N= (yes above)	132	120

Table 15 - Removed any Lawn? (Q39)

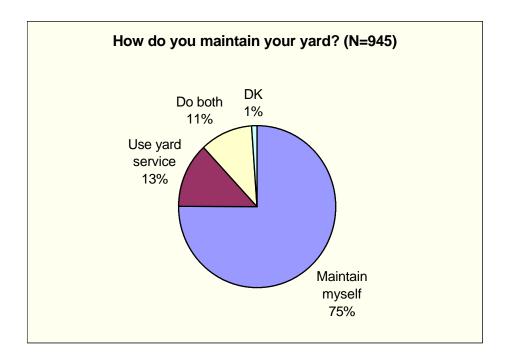
Over Time Comparison – Removed Any Lawn?	1994 Survey %	1999 Survey %
Yes	35	30
No	65	69
N= (those who have a lawn)	1517	821

Other Yard Care Practices

Q41. Do you mostly maintain your own yard, mostly hire a professional yard service to maintain it, or do you do both?

Most respondents (75%) maintain their own yards while 13% use a yard service and 11% do both (**Figure 27**). Seattle and Purveyor customers do not differ on this question.

Figure 27 - How Yard is Maintained (Q41)



Regional Comparison – Who Maintains Yard? <i>N.S.</i>	Seattle %	Purveyor %	
Self	73	77	
Service	14	12	
Both	11	11	
Dk	1	0	
N=	445	497	

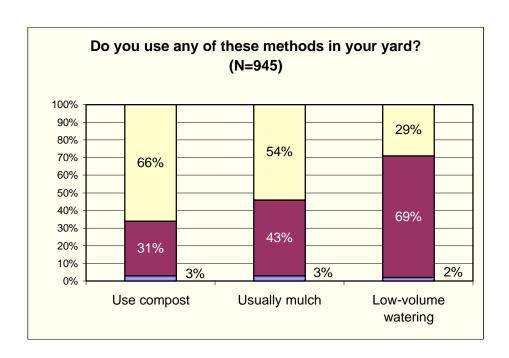
Q42. Do you use any low volume watering methods in your garden such as drip irrigation?

Q43. Do you usually mulch your planting beds?

Q44. Do you usually improve your soil with compost or other organic amendments?

As shown in **Figure 28** below, respondents show little use of low-volume watering (69% say they don't), but over half (54%) usually mulch and two-thirds (66%) usually use compost. Seattle and Purveyor customers do not differ.

Figure 28 - Use of Low-Volume Watering (Q42), Mulching (Q43), and Composting (Q44) Methods



Regional Comparison-do you? All N.S.	YES		NO	
	Seattle %	Purveyor %	Seattle %	Purveyor %
Use compost	66	65	32	30
Usually mulch	56	53	42	43
Low-volume water	31	27	66	71
N=	445	497	445	497